

**Amendments to the Specification:**

Please replace the abstract of the disclosure with the following revised abstract:

--In the conventional arc welding control unit, since the air of the outside of the equipment is applied directly to the whole of the main semiconductor for cooling, there is found a problem that dust, welding fumes and the like can accumulate on or adhere to the conductive portions of the inside of the equipment, which takes time for maintenance of the equipment. To solve this, ~~according to the invention,~~ there is provided an arc welding control unit having a heat radiating unit built in the box body thereof for discharging the air heated by a heat generating first electrical element to the outside. The heat radiating unit has a tunnel-type shape including an outer peripheral portion for defining a cavity portion allowing the air to flow therethrough, whereby dust, welding fumes and the like can be prevented from accumulating on or adhering to the conductive portions of the inside of the equipment.--

Attachment: Replacement Sheet

Please replace paragraph [0005] with the following amended paragraph:

[0005]

Specifically, as shown in Fig. 8, the fan 103 is operated to take in the air from the outside and the air is applied to an integrated body formed by contacting the heat sink 104 with the main semiconductor [[5]] 105, while the air heated is exhausted from the air intake/exhaust opening 102 to thereby discharge the heat of the control unit.

Please replace paragraph [0016] with the following amended paragraph:

[0016]

Fig. 1 is a perspective view of a heat radiating unit used in an arc welding control unit according to the present embodiment, when viewed from the backward and rightward direction of the heat radiating unit. In Fig. 1, reference character 1 designates a heat radiating unit; and, 4a and 4b stand for the side surface portion and the top surface portion of the heat radiating unit 1 respectively, while they form the outer peripheral portion of the heat radiating unit 1. Also, 28 designates the power transistor in the primary side inverter circuit shown in the circuit diagram of Fig. 5. Further, 10a stands for an opening formed in the end portion of the heat radiating unit 1, and 8 designates fans respectively arranged in the opening [[8]] 10a. The respective surfaces of the side surface portion 4a and top surface portion 4b are formed in such a manner that the power

transistor 28 and the like are connected to flat plates such as thin metal plates which are the base materials of the portions 4a and 4b; and, owing to the thus formed surfaces, the heat radiating unit 1 has a tunnel structure including a cavity portion. That is, the heat radiating unit 1 has a tunnel structure in which the electrical element generating intense heat is used as part of the outer peripheral portion thereof defined by the top surface portion and side surface portion thereof; the cavity portion 3 is defined by the outer peripheral portion; and, the heat is discharged in such a manner that the cavity portion and the outside are isolated from each other.

Please replace paragraph [0029] with the following amended paragraph.

[0029]

As described above, according to the present embodiment, since the heat sink [[8]] 6 and box body [[9]] 2 are shut off from the air existing in the inside of the equipment, dust, welding fumes and the like can be prevented from accumulating on or adhering to the conductive portions of the inside of the equipment. This not only can improve the maintenance of the equipment greatly but also can secure the reliability of the equipment as well.

Please delete the paragraphs beginning at page 9, line 18, which start with "BRIEF  
DESCRIPTION OF THE DRAWINGS", and ending on page 10, line 9.